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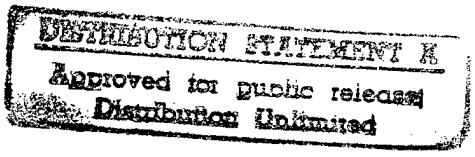

Telecommunications

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SEYCHELLES

Telecommunications Agreement With France Reported

34190093 Victoria SEYCHELLES NATION in French 28 Dec 88 pp 1-2

[Text] Yesterday's signature of a 3-million-franc finance agreement by Minister for Education, Information, and Youth James Michel and French Ambassador to the Seychelles Mr Reynaud Vignal marks the beginning of a new era in Seychelles television. In 12 months at most, the Seychelles will have a ground-based receiving station aimed at Telecom I that will provide us with 12 hours of French television programming daily.

French Ambassador to the Seychelles Mr Reynaud Vignal emphasized that the agreement just signed between the Seychelles and France is a real first.

This is the first time that France has given such direct support to the cultural life of an independent country, one with which, however, it does share the same language, a common heritage, and deep-rooted historic ties dating back to well before the Seychelles' participation in the French Revolution.

"This agreement recements the multidimensional and mutually advantageous cooperation that exists between our two countries," Minister for Education, Information, and Youth James Michel, added.

Satisfaction on both sides is de rigueur—a sign that both parties are seriously committed to this form of "immediate cooperation." It is a sign, too, that television, the "open window on the world," can also be a very good means of bringing different peoples together. Not only is it a way to experience events "live;" it strengthens ties within the French-speaking community. We will have a good example next year with the bicentennial celebration of the French Revolution. Several nations are participating in the event, including the Seychelles.

In a sense, the agreement is a small revolution for Seychelles television, which is gradually reaching maturity. This revolution is very recent history and must be divided into two phases.

By January 1983, the French had already participated actively in the start-up of Seychelles television. During this first phase, France furnished overall financing for the project, opened two technical assistance offices, provided programming, and conducted professional training.

By furnishing Seychelles television with the latest equipment (a 9-meter antenna system and accessory reception equipment, i.e., two BVU videotape recorders, technical bays, and interconnection and control hardware for broadcasting) and a fantastic "picture tap," yesterday's agreement has initiated the second phase: that of program variety and diversity.

This new phase is entirely in keeping with the essential functions assigned to communications by the Seychelles Government, as Mr James Michel recalled in his speech: information, education, culture, training, and entertainment.

It also means that there is a great deal of flexibility in the 12 hours of daily programing the Seychelles is to receive. Seven hours will come from Antenne 2 and 5 hours from RFO [French Overseas Broadcasting]. Programming consists of lengthy news segments and a large variety of other types of broadcasts, including news magazines, films, and series. The programs come from all over the world and not just the French-speaking countries (France, Belgium, Canada, etc.), as Jean Francois Desmazieres, who is head of the French Cooperation Mission and responsible for the project, emphasizes.

This program package is also intended to meet the needs of an eager audience on whom television now has considerable impact. Still in its infancy, Seychelles television has become a privileged means of communication, as new vistas open before it and it prepares to welcome this flood of innovations. The arrival of the satellite may very well coincide with an extension of programing beyond the 3 weekend evenings, making television an everyday event.

Fujian Enhances Telecommunications Services

HK1302235589 Beijing CEI Database in English 13 Feb 89

[Text] Eastern China's Fujian province has made progress in developing its post and telecommunications services.

Six program-controlled telephone exchanges have been installed in Fuzhou, Xiamen special economic zone, Minnan triangular development area and Fuqin county. They can handle 65,000 lines.

88 percent of the cities and counties of the province have automatic exchanges. In 30 cities and counties, users can dial directly to more than 100 countries and regions. More than 80 international telephones and telephones to Hong Kong and Macao have been installed.

Shandong Increases Capacity of Urban Telephone Lines

SK1502031389 Jinan Shandong Provincial Service in Mandarin 2300 GMT 13 Feb 89

[Text] Last year our province had 295,700 urban telephone switchboards, an increase of 16.78 percent over the previous year. Of this, some 262,300 are automatic switchboards, accounting for 88.71 percent of the total capacity of telephone switchboards, and more than 55,000 are program-controlled switchboards, accounting for 20.97 percent of the total number of automatic switchboards.

INTER-ASIAN

ASEAN Nations Detail Telecommunications Plans

5500A057 Chichester INTERNATIONAL TELECOMMUNICATIONS INTELLIGENCE in English 23 Dec 88 pp 2-4

[Article: "Telecoms Development in South East Asia"]

[Text] Industry and government telecommunications representatives of the Association of South East Asian Nations (ASEAN) recently met in Bali for the South East Asia Telecommunications Conference. Outline details of on-going and future projects for telecommunications development in the six-member countries of Brunei, Indonesia, Malaysia, Philippines, Singapore and Thailand were given.

Brunei

Over $150 million is to be spent on developing the country's telecommunications services during its current five-year plan which is in its third year. The plan includes the installation of an additional 35,000 telephone sets; the provision of a country-wide public paging service; the digitalisation of all interexchange trunks and the provision of telephone and telex services on demand.

At the beginning of next year international direct dialling services are expected to be available to all subscribers and a country-wide cellular mobile telephone service is scheduled to begin in July 1989. A route survey is to commence soon for two international fibre-optic submarine cable systems which will connect Brunei with Singapore and the Philippines.

Brunei is also considering the possibility of transferring the responsibility of telecommunications services to the private sector.

Indonesia

Discussing Indonesia's telecommunications plans, Minister of Telecommunications Soesilo Soedarman said that developments under the new plan would encourage private sector participation and that a bill to amend the Telecommunications Law of 1964 would soon be put before Parliament. He also said that the build-operate-transfer approach to projects is not as attractive to Indonesia now because of recently increased availability of soft loans.

Indonesia plans to spend approximately $315 million on telecommunications equipment next year. Almost all the demand will be for imports including transmitters and transceivers, radio navigational reception equipment, teleprinting and teletype machines, telephone instruments, fixed bars (cellular), recorders for subscription, satellite antennas, fibre-optic cable, switching equipment, microwave transmission equipment and television de-scramblers.

Malaysia

Syarikat Telekom Malaysia, the private company set up in January 1987 by Malaysia's government telecommunications department, is to be assessed before shares are offered to the public. During the current development plan STM will concentrate on its re-organisation from a government department to a private company; improving the existing telecommunications system, especially through computerisation of customer service management, the automation of telephone exchanges, and financial and inventory management; financial restructuring, including reduction of STM's high debt-equity ratio; and carrying out an in-depth review of tariff rates.

The number of telephone subscribers in Malaysia is expected to reach 1.5 million by the end of this year. The growth rate in the telecommunications sector averages 10.3 percent a year as a result of a policy to provide telecommunications services on demand.

Philippines

In an attempt to improve telecommunications facilities in the Philippines, the much-criticised Philippines Long Distance Telephone Company (PLDT) has announced major expansion plans for the network. Currently, there are 6 telephones per 100 people in the capital Manila but taking the country as a whole the number falls to only 1/100. The waiting time for a telephone line in Manila is on average three years, while people in rural areas have to wait much longer.

Project under way or to be carried out over the next five years include:
Maritime Communications Project (1989-1992);
Total cost: $40.9 million; Funding: OECF.

Regional Telecommunications Development Project (1988-1990) Total cost: $119.4 million. Funding: OECF.

National Telephone Programme Phase I, Tranches I and II (1988-1993); Total cost: $606.7 million; Funding: OECF, Italiana Communicazioni, and Canadian International Development Agency.

Development of Meteorological Telecoms (detailed engineering) (1988-1993);
Total cost: $28.4 million;
Funding: OECF.

Radio Monitoring and Direction Feasibility Finding Facilities (feasibility study) (1989-1992);
Total cost: $82.1 million;
Funding: US Trade & Development Programme.

Development of Nationwide Telex/Gentex networks (1990-1992);
Total cost: $13.9 million;
Funding: OECF.

X-5 Programme (1989-1991);
Total cost: $353.9 million.

Other projects with prospective OECF funding include:

Postal Equipment Procurement Project III (1990-1992);
Total cost: $5.85 million.

Postal Equipment Procurement Project IV (1992-1994);
Total cost: $6.65 million.

Japanese companies are expected to win the majority of contracts since the main source of funding is from Japan's Overseas Economic Co-operation Fund (OECF). However, other international companies are expected to get a share of the market including AT&T and Andrews (US), Plessey (UK), Siemens (West Germany), and Alcatel (France).

Following several months of negotiations and against strong international competition, Siemens of West Germany has, this month, clinched a contract valued at more than DM300 million ($172.3 million) for the supply of a complete telecommunications network.

Under the PLDT's X-5 Programme for the establishment of new Metro Manila and provincial exchanges, Siemens will supply a total of 27 local and transit exchanges, including an international gateway exchange, in all-digital EWSD technology, as well as all transmission systems (including digital microwave radio backbone systems) and communication cables required. The project will add a further 100,000 subscriber lines to the network. Besides the turn-key network equipment, Siemens will also provide the constructional and civil engineering works, including the access roads to radio relay stations, in cooperation with local Philippino building companies.

Philippino telecommunications personnel will be instructed and trained by Siemens locally and in West Germany.

These additional lines will increase the proportion of subscriber lines satisfied by Siemens equipment from its current figure of 33 percent, built up over 10 years of association with the Philippines' PLDT.

All work carried out under the contract is scheduled for completion by mid-1991.

Earlier this year the Asian Development Bank agreed to provide technical assistance to the Department of Transport and Communications to develop an appropriate policy and regulatory framework for the telecommunications sector and to encourage desperately-needed investment.

Meetings are also being held with representatives from the World Bank to discuss a $40 million loan for development in the southern island of Mindanao.

Singapore

Singapore's telecommunications programme focuses on the development of an integrated services digital network (ISDN), Teleview, public office automation, aeronautical satellite communication and submarine cables. Teleview is a pilot project for the trial installation of a viewdata and teletext service. The $19 million contract was awarded to BT, GEC, and Marconi back in 1985.

Thailand

The Telephone Organisation of Thailand's sixth economic and development project (1989-1991) will include an additional 100,000 lines and a nationwide data leased line network. A new generation of stored programme control digital exchange equipment, additional fibre-optic cable and microwave links and expansion of the cellular system are planned in the seventh development plan (1992-1996).

The Communications Authority of Thailand has announced that in 1990 it intends to purchase a new master earth station and install a new telex exchange in Bangkok.

INDIA

Telecom Official on Nonfulfillment of Plan

55500038 New Delhi PATRIOT in English 1 Jan 89 p 5

[Interview with Telecommunications Secretary Satyapal by Shibani Dasgupta: "Financial Constraint Hinders Telecom Plans"]

[Text] Today, in cities, while it is easier to communicate with people in any part of the globe our own village folks can't even contact their district headquarters. Communication system being infrastructural in the development of any country. [as published] TELECOM department some time back had envisaged to link rural areas under its ambitious RAX programme and facility of telephone connections on demand.

However, three years after, schemes are yet to be implemented. In an interview with PATRIOT correspondent Shibani Dasgupta, telecommunications secretary Satyapal talks about the constraints in the timely implementation of the schemes.

PATRIOT: Excerpts: What is the outlay of 8th plan and what is the extent of resources crunch that the department is facing?

SATYAPAL: The estimated investment outlay under Eighth plan is Rs 19 thousand crores. The proposals are being sent to the Planning Commission. So after the Planning Commission approves the proposals, it would indicate as to how much telecom sector could spend. In the Seventh Five Year Plan we had made a projection of Rs 13,000 crores and the Planning Commission approved only four thousand ten crores. So at this stage we do not know out of estimated outlay of nineteen thousand crores how much we are going to get. But looking at the present indications we might be able to get about fifteen thousand crore. This is my estimate.

There are, however, a number of other factors which influence the total outlay, like the type of duties that the government imposes. Telecom sector imports a lot of raw materials for manufacture of equipment in the country. Even copper for the cables is imported.

If the duty on the raw materials is increased the cost of the finished equipment naturally goes up. So when we talk of the Rs 19 thousand crore, we are talking on the basis of 1988-89 prices and duties.

And if the duties are increased so would increase the estimated outlay. And if duties are reduced. The plan outlay would also come down. So these numbers are not very—sort of sacred, so to say. They are to be seen in relation to what duties the Government is going to impose, or the levies the Government has. In the case of our factories, they have to pay excise duty on whatever we produce in the country. Suppose today the excise duty is 21 per cent and it is raised to 30 per cent then automatically purchase price goes high.

PATRIOT: How do you then balance this difference?

SATYAPAL: We are taking this into account, during this year 88-89 we had made a certain estimate for this year's funds before the budget was announced. When the budget was announced, everything went up—the excise duty, customs duty—we realised our requirements of funds would go up too.

So, that exercise we carry out only after the budget is announced it is in no way that I can have a very accurate forecast for the next five years. Coming to the ninth Plan, this will be incomplete; I tell you about the number of telephone connections to be provided, in the Eighth Plan projections. In the Rs 19000 crore plan we are going to provide 50 lakh new telephone connections, that is our target. We want to provide five million new telephone connections in the Eighth Plan period, which is the 19,000 crore plan.

PATRIOT: What happened to the assurance of telephones on demand? The Government had promised three years ago.

SATYAPAL: Our aim was to reach that level by the year 2000. That is if we are able to provide the five million telephones connections by the end of the Eighth Five Year Plan, then we would provide 92 lakh telephones in the Ninth Plan. So, with this provision of telephone connections by the end of the Ninth Plan we shall be able to provide telephone on demand. This of course, presupposes a certain rate of economic growth and a certain rate of growth in our capability to provide telephones. Based on the economic study we have carried out, it is estimated that we would achieve the target of telephone on demand by the year 2000.

PATRIOT: Why has the Telecom Commission formation being deferred? [as published] What is its fate now?

SATYAPAL: Normally, it goes through a process of discussions and consultations and the final proposal is now with the Cabinet. So, as soon as the cabinet is able to have a discussion....

PATRIOT: Could you elaborate on the composition of the Telecom Commission.

SATYAPAL: Basically, it is on the lines of the Atomic Energy Commission—it has a Chairman and four permanent members and there are four part-time members. The permanent members are going to be working whole time for the operations, development, maintenance and planning of the telecommunications network and the four part-time members are from other Government departments—Planning Commission, Finance, Industry and Department of Electronics. These are the four

departments who closely interact with our plans—Planning Commission for plan allocations, Finance for Foreign Exchange, Industry for issue of licences for setting up factories to develop manufacturing capacity and Department of Electronics for the manufacture of components. So the Commission can now take up a total consensus view of the total telecom development.

PATRIOT: On rural exchanges, the plan was to produce one a day. What is the present state of the plan?

SATYAPAL: Basically they were of 88 subscriber lines. The 128 port designed by C-Dot and the equipment can function without airconditioning. It is suitable for rural environment where power supply is not reliable and steady. In this too, C-Dot is going to use certain percentage imported components—about 50 per cent. So, we had planned to provide one exchange per day, in the current year. We had placed an order for 120 exchanges from C-Dot during the current year and the balance was to come from ITI.

Initially, when the equipment was made by C-Dot it had certain deficiencies in respect to climatic conditions. Our country having diverse weather conditions from very hot to extreme cold, normally we subject out equipment for environmental testing so that the system does not fail after it is installed. The initial equipment produced by C-Dot did not pass this test, so we withheld further production of the equipment till they were able to rectify the deficiencies in the components so that these components would not fail in extreme climatic conditions.

Now they have redesigned the equipment, which has passed our environmental testing—well this was just a month back. Out of the 120 exchanges ordered, 80 have been given to us by C-Dot. ITI will take up production after C-Dot completed the designing. We have now given ITI clearance for mass production. ITI in turn has now to import components.

We hope in the current year we would be able to have 150 exchanges both from C-Dot and ITI as against our requirement of 350. When going for production, unless we have local availability of components, we will run into trouble over it. This is the reason for delay in implementation of the RAX programme.

PATRIOT: Why do you want to import small exchanges from Japan when C-Dot already has it in the form of 512 port exchanges. The imported exchanges will need airconditioning and acclimatising?

SATYAPAL: C-Dot bigger capacity exchanges also need full airconditioning. As much as the Japanese system. Environment-wise there is no difference. The Japanese exchanges are coming in right from 400 lines to 1,500 lines. C-Dot's 512 exchange capacity is only 400 lines, suppose I want 500 connections, it cannot give me the connections. Also even here, in the 512 port system, there is a need for more imported components than in the 128 port and we will face a more serious problem on this count. And for the 512 port exchange. Only one has been installed in Delhi Cantonment which is yet to be fully tested. It is not fully proven, again they have to give the equipment for testing in the environmental chamber.

PATRIOT: Do you fear any problems?

SATYAPAL: No, but you see, they have developed a basic design, the development process takes time. They may design something in the lab, but under live circuit conditions, in order to meet our specifications, it may require some more design work, or modifications to be done. That may require some more time and I cannot wait for that. That is why for next year 1989-90 we are importing some equipment from Japan. We have a target for providing subscriber trunk dialling to all district headquarters under the seventh Plan. Unless I can install the equipment by September'89, I cannot commission the facility by March'90. For C-Dot, we will have a lot of work during the eighth Plan period, once they have removed the bugs. We are going to import from Japan in order to keep up our seventh Plan target.

PATRIOT: Are you confident that C-Dot will be able to remove the bugs?

SATYAPAL: I am confident, very confident, only it is a question of the time frame, whether it will take two months or six months for the task. One cannot be very sure.

IRAN

Khamene'i Inaugurates Babol Telephone Exchange

LD1402121588 Tehran Domestic Service in Persian1030 GMT 14 Feb 89

[Excerpt] The president also inaugurated the first phase in Mazandaran Province's intercity telecommunication center project today. The center is situated in Babol and has a capacity of 1650 units. With the commissioning of this project, 12 towns in Mazandaran Province have been given telephone codes and linked to the country's intercity telecommunications network.

China To Transfer Satellite Technology

55004703 Tehran KAYHAN INTERNATIONAL in English 21 Dec 88 p 6

[Text] China's Post and Telecommunications Minister Yang Taifang Tuesday talked of transferring communications technology, including satellite know-how to Iran, in a meeting with Iran's Deputy Minister of Post, Telegraph and Telephone Br Bahreinian.

Bahreinian in reply described as "important" Tehran-Beijing cooperation in technology and other expert areas, and placed emphasis on expansion of such ties.

The Iranian official arrived here Monday at the head of a delegation for a one-week visit.

BANGLADESH

Plan To Modernize Domestic Telecom Announced

55500041 Dhaka THE NEW NATION in English 26 Dec 88 p 3

[Text] The government has undertaken a Taka 200 crore project to bring the country's 300 Upazilas under a quick and efficient radio telecommunications network, official sources said, reports UNB.

The project, being implemented with substantial Scandinavian financial and technical assistance, is likely to be completed by June 1990.

The new system will be non-vulnerable to adverse physical and climatic factors that threaten to cripple the existing wire-telecommunication network among the Districts and Upazilas, engineers involved with the project told UNB.

The system will employ wireless ultra-high-frequency (UHF) radio links between the Districts and the Upazilas consisting of five channels and will also have provisions for expanding it into a 60 channel network, sources of the T&T Board said.

About half of the project's total expenditure has been coming from foreign sources, of which 55 per cent will come as outright grant from the Finland government, while 45 per cent will be provided by Belgium as credit.

The Finnish grant is being used for implementation of the project in 1165 Upazilas, while the Belgian credit utilised for 135 Upazilas, the sources said.

The provision of multiple channels operating simultaneously will end waiting for hours to get a trunk line. At present, the district-to-upazila telephones are single-channeled which allows only one call at a time.

As part of the project, UHF towers, antennas, panels and other auxillary equipment are being installed at the Upazila and District exchanges.

One interesting feature of the project, a Finnish Consultant said, is that the stations at Barisal, Patuakhali and Bhola would be using solar power to run the exchanges. This will be the first use of solar power in a large scale project in the country, he said.

Several foreign consultants have been supervising the installation works with the help of the local engineers and experts.

A senior official of the T&T Board said that the government had been trying for more foreign assistance to bring the country's remaining 160 Upazilas under the same telecommunication network.

The physical work on the project started in 1985 and was scheduled to be completed by June 1990, he said.

The new system is expected to greatly improve the standard of telecommunication service by providing an uninterrupted radio link tuning the Upazilas with their respective Districts headquarters as well as the capital.

New International Telephone Circuits Installed

55500042 Dhaka THE NEW NATION in English 24 Dec 88 p 3

[Text] Five international telephone circuits with USA have been added bringing the total number of overseas circuits with states of 15, reports BSS.

The new circuits have been installed at the directives of President Ershad to facilitate better telecommunication links between Bangladesh and USA, a Press release of T&T Board said on Wednesday.

Bangladeshis living in USA informed President Ershad during his recent visit there about the difficulties they face regarding telephone calls. The President asked T&T Board to take necessary steps to remove the difficulties.

OMAN

Telephone Networks Expansion Reported

55000294 Muscat TIMES OF OMAN in English 5 Jan 89 p 5

[Text] Expansion of telephone networks in the al-Batinah Coast and the Southern Region will be completed by the end of 1990, Minister of Posts, Telephones and Telegraphs Ahmad ibn Suwaydan al Balushi said on Monday.

He also said that the total number of telephone connections in the country had now risen to 82,000 from 43,000 in 1985 and 23,000 in the year before.

Mr Balushi commended AGCC cooperation in the field of telecommunications, which, he added, led to unification of telecom charges, reduction of telephone tariffs for calls between member countries at night and standardisation of specifications for training equipment.

He said Oman would host the second session of the general assembly of Arab-sat in April.

PAKISTAN

First Domestic Satellite Ready for Launch

BK1702171989 Islamabad Domestic Service in Urdu1500 GMT 17 Feb 89

[Text] The first Pakistani satellite has been completed by the Space and Upper Atmosphere Research Commission, Suparco, and is ready for launching into space. The satellite, called (Badar-Alif), has been manufactured completely by indigenous means and all its systems, subsystems, and instruments have been designed and fabricated by Pakistani engineers. The satellite will collect information from ground stations and dispatch them to any destination that falls within its journey. The (Badar-Alif) will have a circular orbit of 300 to 400 km above the earth in space and will be over Pakistan's horizon four to six times every 24 hours.

Problems With Spanish-Soviet Joint Venture Discussed

18250057 Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 28 Dec 88 p 2

[Article by Candidate of Economic Sciences N. Bukhalov, deputy director of the Telur joint venture in economics and finance, Perm: "An Order for... A Worsening"]

[Text] *Over a hundred joint ventures have been created in the country today. Their still small experience shows that serious problems have already appeared in this new business for us. Some of them can be seen from the example of the Soviet-Spanish Telur venture. Its founders were the Perm Telephone Plant and the firms Telefonica Internacional de Espana and Amper. Telur is to produce the first batch of telephone apparatus by the end of this year and bring its production to 650,000 units a year in the very near future.*

It is naturally assumed in the creation of such enterprises that the most progressive design and technological solutions being offered to the foreign partners should be implicit in their products. It is already now clear, however, that many of the solutions being realized at Telur are far from the best world analogues. And the matter is not so much that the Spanish participants are trying not to transfer their own latest technical achievements to us. The chief reason is something else: the Soviet side is oriented toward the maximum utilization of domestic constituent parts, materials and equipment. And what is that leading to? The replacement of some imported parts in the Telur-201 telephone with Soviet ones, for example, is making it non-competitive in the world market in practice.

The substitutions moreover not only worsen the operating features of the product, but also have an effect on the technology and raise the labor-intensiveness of their manufacture. An absurdity results: first we pay for the design, technology and organization of production (accepting it as the contribution of the foreign partner in the charter fund of the enterprise), and then, making changes, bring to naught all the advantages.

What dictates this solution? To all appearances, the best of intentions: in refusing to procure constituent parts, we are able to ensure the foreign-currency profitability of the enterprise in the shortest possible time. Moreover, it would seem that practical steps have been taken: a sector program for the conversion of the Telur-201 to a domestic material and parts base meeting world standards has been created. But the shame is that this program has been constructed according to all the rules of directive management: not only not proceeding from the interests of the executors, but even without regard for those interests or in spite of them. In other words, coercion of the enterprises rather than incentives. Whence the results: half a year has passed, and four of the nine measures have been conclusively disrupted, and another two will at best be fulfilled after a year's delay.

A solution on such shaky ground thus has predetermined the lack of foreign-currency profitability for the joint venture. One could object that after all, the utilization of the full volume of imported constituent parts, materials and equipment would make the recouping of foreign currency more difficult. Yes, that is so. But there is a way out: it is enough to stipulate in the founding documents the obligation of the capitalist firm to procure such a quantity of items manufactured by the joint venture as would completely cover its foreign-currency expenditures. And it must be said that such a condition would be advantageous for our partners as well as us, since the discussion would concern the market competitiveness of the products. The joint enterprise naturally reserves for itself the right to seek sales markets independently for freely convertible currency.

We have also encountered another problem. However paradoxical it may be, the interests of one of the founders—the Perm Telephone Plant—were not fundamentally analyzed and taken into account in the creation of Telur. What did the appearance of a new independent enterprise literally right alongside signify? The loss of a monopoly position in the production of electronic telephone apparatus, the loss of the leading position in the sector and the region and the appearance of certain complications in the stabilization of the collective. And all of this can hardly be balanced with that portion of the profits of Telur (about 15-20 percent) that will be transferred to the telephone plant at the current stage of development of the economy, when money-exchange relations are still not of a very well-defined nature. And it must also be added that in the face of an acute shortage of production space, the telephone plant was forced to surrender three of the four floors of a newly constructed wing to the joint venture under a lease arrangement and divert its own construction capacity for its modernization.

And where could such a situation lead? To the natural inclination of the executives of the telephone plant to establish rigid administrative-command relations with Telur, reduce its operational independence to a minimum and transform the joint venture into a sort of plant shop. There is probably no need to prove that the realization of these aspirations would essentially signify the demise of the joint enterprise.

And the possibility of directly managing the activity of Telur is implicit in the founding documents, which in practice did not envisage any independence in the direction of the joint venture or in the composition of its guiding organ—the board. All of the members of the board from the Soviet side, with the exception of the general director of Telur, are workers of the scientific-production association for subscriber telephone equipment recently formed on the basis of the Perm Telephone Plant. Its chairman in the general director of this same association.

It seems that it would be expedient to include on the board of joint ventures, especially in the stage of their emergence, representatives of the ministries in which the

enterprise functions, as well as employees of the Ministry of Foreign Economic Ties, the Chamber of Commerce and Industry and the USSR Vneshekonombank.

In considering the situation of Telur today, you become convinced of how important it is to set priorities correctly right at the start, in the preparatory phase, and to define the principal elements of the strategy of the joint venture.

Improved TV Reception in Distant Regions Planned

18310434a Baku KOMMUNIST in Azeri 22 Jun 88 p 4

[Interview with S. Guliyev, chief of republic radio and television transmission center: "Transmitters working at a new range will guarantee quality and reception of television broadcasts"]

[Editorial Introduction] "In several letters to the editor it is noted that in a number of rayons reception of Central and republic broadcasts is not normal. Viewers ask why this is the case, what steps are being taken to remove these obstacles, and what do specialists suggest? A KOMMUNIST correspondent asked S. Guliyev, chief of the republic radio and television center, to answer these questions." [Text] "First on the principles of sending television signals. Because these signals are broadcast in ultrashort waves the distance at which they can be 'seen' is dependent on transmitter strength and antenna height. Signals cannot be transmitted farther than 50-60 kilometers by powerful transmitters built in the plains.

Transmitters built by Iran along the Soviet-Iranian border have a greater 'seeable' distance due to their location in high mountain territory, and these create a number of obstacles to television reception in several of areas of our republic, especially in the lowlands. If one takes into consideration the complexity of Azerbaijan's terrain, its variation and range in meters, and the fact that there are 12 television channels, it becomes clear how difficult it is on both sides to prevent transmitters on both sides from obstructing each other.

In order to eliminate obstacles and create harmony in the reception of Central and republic television switching over to the new decimeter wave length has been considered. This will make it possible to receive television broadcasts on channels 21-61. This will increase the number of channels from 12 to 40 and significantly improve the quality of picture reception on these channels.

A number of powerful decimeter transmitters have started operating in our republic. Transmitters built in Ali Bayramly and Shusha make it possible to receive broadcasts of the Second All-Union program on channels 28 and 33 in these cities as well as Gazymammad, Sabirabad, Saatly, Aghdam, Barda and Stepanakert. By means of a transmitter operating in Ivanovka one can also see broadcasts of the First All-Union program on channel 30. This channel has also been considered for Ismayylly, Gutgashen, Ujar, Zardab and Kurdemir Rayons.

It is possible to receive decimeter range signals on the new 'D' televisions with a special antenna. Those without such televisions might ask: what are we supposed to do? Television and radio repair shops of Azerbyttekhremont, taking into consideration that a new wave length is being used on republic territory, have been supplied with special components. This component is attached to non-'D' television and guarantees their operation under the new system."

New Mongolian Broadcasting Center Reported

PM1101111589 Moscow PRAVDA in Russian 10 Jan 89 Second Edition p 5

[V. Sapov report, "Countries of Socialism: Events, Facts, Commentaries": "Television Center Goes Into Operation"]

[Text] Mongolian television broadcast the New Year programs via a recently opened studio center, which was built with Soviet technical assistance.

With the commissioning of this center, the volume of radio broadcasts will increase by 50-150 percent and, by 1990, national television programming will amount to some 2,000 hours per year. So far, 90 percent of Mongolian people have the opportunity to listen to radio and some 50 percent can watch television broadcasts. There is an accord with the Soviet Union to launch a communication satellite for socialist countries in the Asian and Pacific region.

The new television center is only one of many projects for "propaganda purposes."

EUROPEAN AFFAIRS

EC Ministers Approve ISDN Report

5500A056 Brussels EC PRESS RELEASE in French No IP(88) 751, 30 Nov 88 pp 1-2

[Article: "Strengthening Coordination for the Introduction of the Integrated Services Digital Network (ISDN) in the EC by 1992"]

[Text] At their informal meeting on 5 November 1988 in Athens, the EC telecommunications ministers approved the annual report presented by the European Commission concerning the coordinated introduction of the Integrated Services Digital Network (ISDN) throughout the EC.

ISDN is based on the joint use of digital telephones and computers. It can be considered a natural evolution of the traditional telephone network that allows access to a large variety of services, such as voice (telephone), text (high speed telefax, teletex), data, and image transmission, by using a single wideband network (also referred to as an "electronic highway") and a new data communications tool—the interface—between user and network. ISDN constitutes an important basis for the telecommunications equipment and services single market.

The ministers also approved both the observations and the policy positions put forth in the Commission's report. They stressed the fact that top priority should be given from now until 1992 to pursuing and strengthening coordination and joint efforts at the Community level to ensure Community-wide access to commercial, pan-European ISDN services. The Commission, which had been asked to prepare a formal position relevant to the proposed policies, today did so in adopting a Council resolution and expressing a consensus.

The Proposal

The EC member-states have made considerable strides in introducing ISDN conforming to the Council's recommendation of 22 December 1986. However, because of delays and difficulties encountered during the initial phases, the recommendation's principal objectives have been only partially realized. Specifically, the Commission has proposed three areas for coordinated efforts: access to commercial services, complete compatibility of these services and availability of low-cost terminals, and improvement of the competitiveness of European industry.

According to the Commission, the following measures are necessary:

- In the area of standardization: speedier establishment of joint specifications based on European standards for equipment and interfaces, and, in particular, the definition of a minimum series of common European interfaces between user and network.
- In the area of services: the establishment of a memorandum of agreement among the PTTs to provide at least a minimum range of pan-European ISDN services and features and to introduce a common signaling system.
- In the industrial area: research into ways of allowing companies to contribute to the development of European standards and common specifications for terminals and other equipment.

In addition, the need to protect users' privacy should be examined in light of the new services.

DENMARK/GREENLAND

Digital Exchanges Purchased From Ericsson

55002448 Copenhagen BERLINGSKE TIDENDE in Danish 31 Jan 89 Sect 2 p 5

[Article by Sv. Aa. Jensen]

[Text] The Danish telephone companies have signed a contract with L.M. Ericsson A/S for delivery of digital exchanges for a sum of 900 million kroner. These are to be delivered over a period extending 6 or 7 years. The order, which was made within the framework of a prevailing contract, is divided among the five phone companies as follows: KTAS [Copenhagen Phone Company] 350 million kroner, Jydsk [Jutland] Telefon 340 million kroner, Fyns Telefon 150 million, Tele Sonderjylland [South Jutland] 50 million and Statens Teletjeneste [Government Telecommunications Service] 10 million. Since 1983, L.M. Ericsson has delivered 10 digital exchanges altogether.

ITALY

Dataspazio To Develop In-orbit Equipment and Software

5500M085 Rome AIR PRESS in Italian 15 Nov 88 p 2154

[Text] Telespazio (IRI/STET group) and Datamat have established a new company, Dataspazio, to supply equipment for satellite and in-orbit control stations, satellite simulators, orbital dynamics software, as well as relevant support and maintenance systems—all of which require considerable expertise in space technologies and software engineering. According to a Telespazio press release, reported by AIR PRESS: "The newly established company will provide an entirely national basis for the development of the earth segment of space systems and software. The company can potentially contribute technology for the domestic and European space programs of the next decade, and this will involve the further development of the space segment as well as the creation and management of ground, support, and simulation infrastructures."

The targets established for Dataspazio's first years of operation include the domestic programs Italsat (pre-operational telecommunications satellite, SAX (a scientific satellite designed to explore X-ray sources), and a number of Earth observation programs. In the European context, the company will contribute to the DRS program (Data Relay Satellite), the Columbus orbiting station, the Hermes shuttle, and the EOP (Earth Observation Program), which includes meteorological missions, the development of polar survey platforms, and solid earth observation.

The press release also states that the establishment of Dataspazio is part of the significant development that our country's space industry is expected to undergo as a result of the ambitious programs undertaken by the Italian Space Agency (ASI) and the European Space Agency (ESA), for which investments of several billion lire are to be made over the next 10 years. To contribute its share to this massive allocation of funds, Italy's space sector must indeed encourage industrial development and rationalization by expanding its human resources.

As AIR PRESS recalls, Telespazio has been actively involved in all areas of the space sector for over 75 years, operating as an agency in charge of intercontinental, European, and domestic connections, as a leading company engaged in the management, orbital control, and telemetry of commercial satellites (it controls over 30 percent of the world market for these services), and as a forerunner in some of the most advanced space applications such as telesurveys and earth observation in general. With 400 employees and profits exceeding 53 billion lire, Datamat is one of Italy's most important software and systems integration companies, specializing in banking and finance as well as the defense and space industries. As for this last sector, Datamat has been engaged for more than 13 years in the development of satellite control systems and in space meteorology applications.

French Telecom 2 Satellite To Use Fiar Equipment

5500M068 Rome AIR PRESS in Italian
11 Nov 88 p 2107

[Text] Fiar will supply products for the French satellite Telecom 2, of which, AIR PRESS recounts, three units will be produced for civil and military telecommunications.

The Milanese company will supply the Electronic Tubes Division of Thomson-CSF with 25 EPC (high voltage generator) systems for the 20-W/7-GHz and 40-W/7-GHz travelling wave tubes (TWT) that are to be installed on all three satellites, the first of which will be placed in orbit in 1991. According to AIR PRESS, a Fiar press release emphasizes that this contract gives the Italian company an opportunity to establish itself as the leading European manufacturer in the field of onboard systems for generating electrical energy for satellite telecommunication systems.

NORWAY

Consortium Formed To Develop, Produce Mobile Telephones

55002449 Oslo AFTENPOSTEN in Norwegian
1 Feb 89 p 19

[Article by Rolf L. Larsen]

[Text] The Elab-Runit research company with SINTEF [Foundation for Scientific and Industrial Research at the University of Trondheim] have together with Simonsen Elektro and EB Telecom formed a consortium for further developing and producing the European mobile telephone (GMS).

The research already done gives the Norwegian producers a head start in the competition for a market which will be worth almost 100 billion kroner for all of Europe around the year 2000. Simonsen Elektro, which is Norway's only maker of mobile telephones, estimates sales of GMS equipment amount to 250 million kroner annually beginning in 1991. The company will have a prototype ready for testing already by the end of this year. The same applies to EB Telecom, which will construct the base stations.

The agreement also provides good financial gains for the Elab-Runit research firm. "It means orders of 15 million kroner annually for the next 3-5 years. Work on the new mobile telephone is accordingly the largest project ever undertaken by the research company," said Truis Gjestland, information office chief of Elab-Runit, to AFTENPOSTEN.

PORTUGAL

Role in Spanish Satellite Project Studied

55002443a Lisbon O JORNAL in Portuguese
20-26 Jan 89 p 32

[Text] Portugal is studying a proposal to participate in the exploration by the Spanish satellite that is due to be launched during the fall of 1991 and become operational during the early months of 1992. The new satellite, with the capacity for television transmissions and other telecommunications services, will be able to "extend in the sky" the recent protocol for cooperation established in Lisbon between Viana Baptista and Luis Solana, the heads of PTT/TLP [Portuguese Post and Telecommunications Office/Lisbon and Porto Telephone Network] and Telefonica of Spain, respectively.

Digital Line Planned Between Lisbon, Porto

55002443b Lisbon O JORNAL DE O DIA in Portuguese3 Jan 89 p 11

[Text] PTT/TLP [Portuguese Post and Telecommunications Office/Lisbon and Porto Telephone Network] reports that telecommunications between Lisbon and Porto will receive a new impetus with the entry of the first digital "line" into operation at the end of the first half of this year.

This "line", with 140 megabytes, has the capacity for 1,920 circuits in simultaneous stations which, in principle, are intended to support the new services now requiring digital transmission: integrated networks, conference-video, and message text transmission services.

The digital "line" is part of the PTT/TLP modernization plan, which will continue during 1990 with the installation of a beam for Viseu, replacing the existing analogic network.

According to PTT/TLP, new 50-megabyte regional beams will also go into operation, connecting Lisbon with Caldas da Rainha, on the one hand, and Braga with Guimaraes, on the other.

Up until now, the existing network was limited to outputs on the order of 8 or 34 megabytes; corresponding to 120 or 480 circuits, respectively, which are considered insufficient.

Also in 1990, another step will be taken for the region, with the introduction of the Lisbon-Algarve "line."

The stations are now being determined, and the land purchase phase is currently under way.

The network will be extended to the entire Algarve by 1990 as well.

In 1990 an international "line" will be "hung" from Leiria to Sao Mamede, to replace the hertzian beam existing in Spain.

Analog Beams

According to PTT/TLP, the large, high-capacity analog beams will all eventually have a digital alternative.

In the case of Lisbon-Porto, the analog beams will continue for some time.

On the Lisbon-Evora route, and some others, the analog beams will be replaced, and only those with digital technology will remain.

The network will be controlled from Lisbon in terms of transmission, and the system will make it possible to advance toward centralized maintenance from Porto to Valenca, with supplementary beams from Porto to Aveiro, and from Aveiro to Coimbra, superimposed on the existing ones.

As for corrective maintenance, there will be information enabling the identification of what is damaged.

In this respect, according to PTT/TLP, it will be possible to achieve a significant reduction in costs and better quality in service.

Although there is adequate supervision for the analogic network (project "Oscar"), "it will never be equivalent to the supervision and quality of service that can be achieved with digital technology."

The digital network will be supported by two or three computers located in the principal nodes of the network.

In addition to performing the supervision, these computers will also provide extremely useful indicators of service and management of the network.

FEDERAL REPUBLIC OF GERMANY

France-FRG: National Telephone Agreements Reached

5500M096 Berlin NTZ in German No 12, Dec 88 p 670

[Text] During German-French consultations the FRG minister of posts, Dr Christian Schwarz-Schilling, and his French counterpart, Paul Quiles, have agreed to name the joint German-French telephone set "Duo." Orders for 100,000 telephone sets each have been placed with the German-French association DFG/Matra. Following a decision on design, bids were invited from throughout the EC in November 1987—the SEL/Alcatel Corporation was among the bidders. The ministers have also signed a general agreement on the joint provision of transnational 64 kbit/s and 1.92 Mbit/s digital tielines and permanent lines. This agreement will take effect on 1 January 1989, enabling German and/or French subscribers to order and pay for such lines in exactly the same way as they already do for national transmission lines. The entire transmission line will be commissioned at one end. The source will therefore be provided by a single supplier.

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